

## **Notes from June 29<sup>th</sup>, 2007 Science Meeting, Tushar Collaboration Held at the Beaver RD, Beaver, Utah**

**Meeting started out with re-introductions and went around the table.**

Attending were:

Terry Krasko, District Ranger, Beaver RD, Fishlake NF  
Doug Sorensen, Range Conservationist, Beaver RD, Fishlake NF  
Mary O'Brien, Botanist, Grand Canyon Trust  
Season Martin, Intern, Grand Canyon Trust  
John Keeler, Utah Farm Bureau  
Mary Erickson, Forest Supervisor, Fishlake NF  
Joe Yardley, Permittee on Pine Creek/Sulphurbed Allotment  
Selena Yardley, Permittee on Pine Creek Sulphurbed Allotment  
James Catlin, Wild Utah Project  
Kaden Gleave, Permittee on Ten Mile Allotment  
Wyatt Barnson, Permittee on Ten Mile Allotment  
John Carter, Western Watersheds Project  
Donald Willden, Beaver County Commissioner and Sportsman  
Bob Campbell, Ecologist, Fishlake NF  
Sean Kelly, Wildlife Biologist, Utah Division of Wildlife Resources  
Steve Flinders, Wildlife Biologist, Beaver RD, Fishlake NF  
Wayne Y. Hoskinsson, Sierra Club  
Lee R. Yardley, Permittee, Pine Creek/Sulphurbed Allotment

Although not on the official agenda, Mary O'Brien was asked to go over her notes from the previous field trips to the Ten Mile and Pine Creek/Sulphurbeds Range Allotments.

A few points were made throughout the notes report regarding:

1. Pine Creek, and the Forest Service will be monitoring it in the next year for turbidity, heavy metals, temperature and flow.
2. Regarding the road along Pine Creek—ATV route only (not full size vehicles) from the South Fork going east.
3. Request made for Appendix H that shows the old chaining treatments.

We went around the room and asked questions regarding the science needed on the allotments.

**Don Willden:** Objected to the beaver reintroduction possibility in Pine Creek.

1. Mary O'Brien had information that it could be a water enhancement possibility with beavers.
2. Don asked why this was so and asked Mary for her science to back this up.
3. Don also asked about the hunting/trapping proclamations.

**John Carter:** John had asked several comments submitted and had the following requests:

1. Topo map of each allotment, showing roads, pastures, water developments, surface water and monitoring locations.
2. Veg Map of each allotment showing pastures, water developments, surface water, monitoring locations with key to veg types.
3. Soil Map of each allotment showing pastures, water developments, surface water, monitoring locations (tabulate soil properties, erosion hazard in a table)
4. Map of each allotment showing the pastures and areas within each pasture with less than 30% slopes and also showing the areas with less than 10% slope. This map should show surface water, water developments, and monitoring locations.

Issues to address:

- Current forage capacity of each pasture
- Current status of aspen and mtn mahogany recruitment
- Potential beaver locations from Level II inventories
- Current condition of each pasture relative to potential
- Grazing system required to restore to potential or near potential
- Monitoring required to assess current capacity and evaluate performance of grazing system
- Other actions to address restoration needs

**Wyatt Barnson:**

1. Elk/deer feeding is the wildlife dominant use of feed.
  - a. Can we make that distinction?
2. What is the competition?

**Jim Catlin:**

1. Asked about institutional restraints/what are the FS's requirements for ecosystem management?
2. How does it (above) shape desirable condition?
3. In order for lands to meet desired condition requirements, do they need to meet the "nonimpairment of productivity" requirements under multiple use?
4. How much forage can be allocated to livestock and meet the requirements above?
5. What kinds of grazing practices (duration, stocking level, timing) is required to restore and then maintain rangelands to meet desired conditions?
6. What opportunities do we have to cluster grazing allotments on BLM, FS, private lands in order to explore new needed grazing practices that we may require?

**Selena Yardley:**

1. Fences are an issue and their destruction is not just by cows.
2. Are there wildlife options?
  - a. Fairness—wildlife eats year round.

**Lee R. Yardley:**

1. Elk eats green, whereas cows get dry feed.
  - a. Cheat grass is edible earlier.
2. Need to talk about earlier on (and also earlier off?)

3. Cheatgrass exists from about 7000' feet and below.
  - a. Drought giving cheatgrass an advantage
  - b. Short time period for cheatgrass treatments?

**Joe Yardley:**

1. Cattle/Wildlife are competitors.
2. Can we get support from the public regarding gates, fences, being cut and can we get help?
3. Cross country ATV use is legally out of the picture from the current EIS.
4. Need more education on fences and gates = social science.
5. Wants recognition of permittees for what they have done, re: improvements
6. Need locations of improvements: troughs, pipelines, effects of water improvements.

**Mary Erickson:**

1. Are we doing more monitoring schemes or improving conditions overall?
2. Budget is always a concern.

**John Keeler:**

1. Monitoring—who will do it and who will pay for it?
2. Looking for short and long term monitoring.

**Wayne Hoskisson:**

1. Premise that the FS accepts monitoring protocols.
2. Who can do it and get it done? There is a need to standardize so data can be accepted from others?
3. Why are the aspen going away, and what can be done to stop disappearance?

**Steve Flinders:**

1. Look at everything, not everything is broken.
2. Need to develop models for functionality.
3. Regarding aspen—other factors in play.
  - a. Lack of disturbance in aspen to get regeneration.
  - b. Fuel Loading and what can be done to modify.
4. Management—can it change to get the disturbance needed?

**Mary O'Brien:**

1. Wants to do aspen browse transects in the elevational belts where aspen occurs (in a season)
  - a. Will use FS protocols in cooperation with Bob Campbell on what the FS uses.
2. Mountain Mahogany recruitment, look at age structure.
3. Beaver science—looking where they've been and how they are keystone nature components.
4. Wants a round up of data—photos, etc. every decade?

**Sean Kelly:**

1. Wants utilization data.
2. What can be extrapolated from other sources?
3. Utah State studies—used radio collars
4. Hard to demonstrate what browsing is elk vs. what is cattle.
5. Studies: Starkey project, get it and has a ton of research.
6. How much can we extrapolate from other studies?
7. Pellet transects have been established on allotments
8. May be able to determine some levels of elk vs. cattle use and stock rates.

**Bob Campbell:**

1. Made note that conifer uses more water than aspen.
2. Recommended a book: Range Plant Handbook.
3. ID for long-range transects requires the ability to key out to species. and we need to factor in Fire data
4. Arrowleaf Balsamroot: re W-43 (forb = weeds)
  - a. Question/answer that it is an indicator of good grazing management. There are some ambiguities that need to be sorted out by various publications.
5. Fire is a question and needs to have effects factored in.
6. Can distribution be enhanced in pastures?

**Doug Sorensen:**

1. Question: what are present grazing systems doing for us?
2. What is the record of compliance?
3. Rotations are part of prescription.
4. Will current grazing reach desired conditions?

**Terry Krasko:**

1. Primary concerns were involved with riparian areas and proper stock management.

**The discussions were then directed to individuals and groups to begin data collection and provide information that has been gathered to this point:**

**Grazing Systems:** Doug will provide current info and compliance issues.

1. John Keeler and Jim Catlin will work with Doug.

**Long Term Trend Transects (six in Ten Mile; 6 in Pine Creek/Sulphurdale):**

1. Transect Studies—Mary can try to get volunteers from Utah Native Plant Society once we can establish dates; again, it's not clear who is lead on the long-term trend transect re-reading.]
2. John Keeler, wants to be involved and suggested we enlist NRCS. He'll also ask Jim Bowns if he will participate.
3. Doug will pull records and get the UTM's.

**Wildlife:**

1. Sean will get past studies and work with Steve.
2. Sean will also get Elk/Deer #'s/estimates.
3. Sean will also get data on lagomorphs, voles, and try to get a handle on how much are they eating. Steve will also help with this, especially with pellet group data.
4. Jim Catlin said he would get a call to Allison Jones to see if she would participate in this.

**Fences:**

1. Sean will look into the Dedicated Hunter program for support on helping to reconstruct/construct/repair fences.
2. Selena and Steve will also look into what needs to be done on the ground.

**Funding:**

1. Jim Catlin and John Carter will look into funding sources and report back. [?]

**Beaver issues:**

1. Mary O'Brien will gather scientific studies re: water flow implications for water users and what flows will support an adequate beaver stock level. Permittees say that Pine Creek does not flow year around and can dry up.
2. Mary will visit Pine Creek with Sean and Neil to look at the stream geometry of Pine Creek, potential size of beaver ponds, and habitat potential. A possible visit to Little North Creek, which was mentioned by Don Willden as having formerly contained beaver. Joe Yardley is interested in joining beaver/stream trips..
3. Terry will ask BLM regarding water rights
4. Sean will look into UDWR mitigations on beaver.

**Cheatgrass: Grazing to reduce it?**

1. Doug and Lee R. will examine this possibility

**E.coli in stream:**

1. Terry will ask Adam Solt if they will check for it. Otherwise, John Carter will follow up for testing.

**Forage Capacity**

1. Doug will firm up his past records. Jim, John, Wyatt, and Joe Yardley help and participate.

**Fish Spawning:**

1. John will do soil cores.

**Aspen Recruitment:**

1. Mary O'Brien and Bob will determine status and look at ramet counts. Going to adapt some FS protocols being used in California. Jim and John have 10-15 cages that could be used. They could bring volunteers for monitoring on Labor Day.

**Range Improvements:**

1. Doug will provide a map and monitoring sites. Jim, John and Wyatt want to help with monitoring/mapping as well.

**Utilization Cages:**

1. Jim, John and Doug will locate and place cages. John has some cages that can be donated and placed.

**Aspen Disturbance possibilities:**

1. Steve and Terry will look into sites and landscape areas. Look at NEPA to see what is possible now and for future project sites.

**BLM Tech Manual:**

1. Bob will locate the manual. [The name Shawna Rae Brown was mentioned. Connection?]

**Multi-Decade Photos:**

1. Bob will locate what is available for the two allotments.

**Range Cattle Distribution:**

1. Permittees and Jim will look at how livestock is dispersed on allotments. Consult AOI and current AMP's.
2. Permittees and Jim will look at supplements/salting techniques.

August 2 was set for the trip up Wildcat Creek: Those who will be walking rather than riding horses or ATVs will walk up August 1. [Where/when will we meet?]

September 17: 9 a.m. in Beaver will be a meeting to compile what data have been gathered; report on what is being gathered.